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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/748,126 | 12/27/2000 | Young-hoon Kim | 400999 | 4152 |

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EXAMINER

CANTELMO, GREGG

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1745

DATE MAILED: 09/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | |
|------------------------------|------------------------|----------------|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 09/748,126 | | KIM, YOUNG-HOON | |
| | Examiner | | Art Unit | |
| | | Gregg Cantelmo | 1745 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 7-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-6 in Paper No. 8 is acknowledged.

Response to Amendment

2. The preliminary amendment received December 27, 2000 has been entered.

Priority

3. Applicant's foreign priority claim is acknowledged.

Information Disclosure Statement

4. The information disclosure statements filed December 27, 2000 and February 6, 2002 have been placed in the application file and the information referred to therein has been considered as to the merits.

Drawings

5. The drawings received December 27, 2000 are acceptable for examination purposes.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-3 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 56-152160-A (JP '160).

JP '160 discloses a prismatic sealed battery (lone figure), comprising a case 1/2 for accommodating and hermetically sealing a power generating element, a lead terminal 4 connected to a first electrode of the power generating element and inserted into an opening of the case and led outside, a fluoride resin 8 between the lead terminal 4 and the case insulating the lead terminal to the case wherein a second electrode 6 is connected to the case 1/2 (lone figure and abstract as applied to claim 1).

The case includes a can 2 having an opening and a cap plate 1 having a through hole welded to the can at the opening (abstract and figure as applied to claim 2).

The lead terminal 4 includes a head and a connecting portion inserted into the opening of case 1 (lone figure as applied to claim 3).

The fluoride resin is Teflon, i.e., polytetrafluoroethylene (abstract as applied to claim 6).

8. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 10-340709-A (JP '709).

JP '709 discloses a prismatic sealed battery, comprising a case 1 for accommodating and hermetically sealing a power generating element, a lead terminal 4 connected to a first electrode of the power generating element and inserted into an opening of the case and led outside, a fluoride resin 13 between the lead terminal 4 and the case insulating the lead terminal to the case wherein a second electrode is connected to the case via electrode tab 11 (Figures 1, 2, and 4, abstract, paragraphs [0007] and [0009] as applied to claim 1).

The case includes a can 1 having an opening and a cap plate 3 having a through hole welded to the can at the opening (abstract and Figs. 1, 2 and 4 as applied to claim 2).

The lead terminal 4 includes a head and a connecting portion inserted into the opening of case 1 (Figs. 1, 2 and 4 as applied to claim 3).

The electrode terminal (pin) is aluminum (paragraph [0009] as applied to claim 4).

The case is made of a nickel-plated material (paragraph [0006] as applied to claim 5).

9. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent No. 6,143,442 (Takahashi).

Takahashi discloses a prismatic sealed battery, comprising a case 1 for accommodating and hermetically sealing a power generating element, a lead terminal 4

connected to a first electrode of the power generating element and inserted into an opening of the case and led outside, a fluoride resin 13 between the lead terminal 4 and the case insulating the lead terminal to the case wherein a second electrode is connected to the case via electrode tab 11 (Figures 1, 2, and 4, abstract, col. 3, ll. 25-30 and 48-53 as applied to claim 1).

The case includes a can 1 having an opening and a cap plate 3 having a through hole welded to the can at the opening (abstract and Figures 1, 2 and 4 as applied to claim 2).

The lead terminal 4 includes a head and a connecting portion inserted into the opening of case 1 (Figs. 1, 2 and 4 as applied to claim 3).

The electrode terminal (pin) is aluminum (col. 3, ll. 48-53 as applied to claim 4).

The case is made of a nickel-plated material (col. 3, ll. 14-16 as applied to claim 5).

The fluoride resin is a fluorocarbon (col. 3, ll. 48-52 as applied to claim 6).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over JP '709 in view of Takahashi.

The teachings of claim 1, with respect to JP '709, have been discussed above and are incorporated herein.

The difference between JP '709 and claim 6 is that JP '709 does not appear to expressly state that the fluoro-resin is one of the materials recited in claim 6.

Takahashi is drawn to the same field of endeavor and further is noted to claim priority to JP '709. Takahashi further states that the fluoro-resin is a fluorocarbon (col. 3, ll. 48-53).

The motivation for selecting the fluoro-resin to be a fluorocarbon is that it provides an excellent insulating material between the electrode pin and the can of the prismatic cell.

Therefore it would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of JP '709 by selecting the fluoro-resin to be a fluorocarbon since it would have provided an excellent insulating material between the electrode pin and the can of the prismatic cell. The selection of a known material based on its suitability for its intended use supported a prima facie obviousness determination in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945) See also *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). MPEP § 2144.07.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. USPAT. 5,856,041 and USPAT 6,509,115 show prismatic cells

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using insulating materials disposed between the casing and one of the lead terminals of the battery. JP 59-049157-A discloses providing a Teflon insulating seal 20 between the terminal and lid. JP 04-092360-A discloses providing a fluorine resin insulating seal 3 between the terminal and lid. JP 59-049157-A discloses providing a Teflon insulating seal 20 between the terminal and lid.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (703) 305-0635. The examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (703) 308-2383. FAX communications should be sent to the appropriate FAX number: (703) 872-9311 for After Final Responses only; (703) 872-9310 for all other responses. FAXES received after 4 p.m. will not be processed until the following business day. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Gregg Cantelmo
Patent Examiner
Art Unit 1745

gc



September 2, 2003